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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,892	06/27/2003	Kurt Thiessen	100110947-1	7238

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EXAMINER

TRAN, LY T

ART UNIT PAPER NUMBER

2853

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/607,892

Applicant(s)

THIESSEN ET AL.

Examiner

Ly T. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-15, 17-27, 29-38 and 40-49 is/are pending in the application.  
4a) Of the above claim(s) 5, 6, 17, 18, 29, 30, 40 and 41 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 7-15, 19-27, 31-38, 40, 42-49 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of species 3 (figure 6) in the reply filed on 11/17/04 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7-15 and 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradshaw et al. (USPN 6,264,295).

With respect to claims 1 and 13, Bradshaw discloses a method and an apparatus of printing within a circular area of a media comprising:

- Positioning a print head (fig.2: element 210) including at least one column of nozzles above the circular area of the media (element 201), including orienting the at least one column of nozzles substantially perpendicular to a radius of the circular extended below the print head (Fig.2, Fig.3)
- Rotating the media relative to the print head (Fig.2: element 201, 208, 214)

- Printing at least one arcuate print pattern within the circular area of the media with the print head while rotating the media (Column 8: line 10-15)
- Printing substantially perpendicular to the radius of the circular area of the media (fig.2 shows the print head prints circular line on the CD in the direction along the line 214 while the DC is rotating, the circular line along the direction 214 is perpendicular to the radius of the circular area of the CD)

With respect to claims 2 and 14, Bradshaw discloses wherein positioning the print head includes orienting the at least one column of nozzles substantially parallel to a tangent of the circular area at the radius of the circular area (Fig.2, 3).

With respect to claim 3 and 15, Bradshaw disclose printing at least one arcuate print pattern includes printing thee at least one arcuate print pattern along an arc center about a center of the circular area of the media and printing at least one arcuate print pattern (Column 7: line 60-65, Column 8: line 9-14)..

With respect to claims 7 and 19, Bradshaw discloses at least one column of nozzles includes a first column of nozzle and a second column of nozzles spaced from and oriented substantially parallel to the first column, and wherein printing at least one arcuate print pattern includes printing a first arcuate print pattern with the first column and a second pattern with the second column (Fig.3: element 304, Column 7: line 60-65).

With respect to claims 8, 9, 20 and 21, Bradshaw discloses that moving the print head and the media relative to each other in a direction substantially parallel to the

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radius of the circular area of the media moving the print head and the media relative to each other including moving the print head along the radius of the media (Fig.2 shows the platter rotating by arrow 214 and the head 210 is moving along by arrow 212).

With respect to claims 10-12 and 22-24, Bradshaw discloses the circular area of the media included an annular area of the media, the media includes an optical data storage disk and the media includes a label for an optical storage disk (Column 4: line 60-61; Column 5: line 35-42).

3. Claim 47 is rejected under 35 U.S.C. 102(b) as being anticipated by Yuji (JP0631906).

With respect to claim 47, Yuji discloses a system for processing an optical data disk comprising:

- Means for rotating the optical data disk (Page 3; claim 3)
- Means for simultaneously printing on the optical data storage disk from a first side of the disk and recording to the disk from a second side of the disk opposite the first side as the disk rotates (fig.2: element 1, 24, 4, Page 6 :[0008]).
- printing substantially perpendicular to the radius of the circular area of the media (fig.3, 4 shows the print head prints circular line on the CD while the DC is rotating, the circular line is perpendicular to the radius of the circular area of the CD)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25-27, 29-38 and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. (USPN 6,264,295) in view of Yuji (JP 0631906).

With respect to claims 25 and 36, Bradshaw discloses a method of printing on an optical data disk comprising positioning a print head adjacent a first side of the optical data (Fig.2: element 210, 201); a print head including orienting a column of nozzles of the print head substantially perpendicular to a radius of the optical storage disk extended below the print head (Fig.2: element 210, fig.3: element 304); rotating the optical data disk relative to the print head (Fig.2) and printing at least one arcuate print pattern on the optical data disk with the print head while rotating the disk (fig.2) and printing substantially perpendicular to the radius of the circular area of the media (fig.2 shows the print head prints circular line on the CD in the direction along the line 214 while the DC is rotating, the circular line along the direction 214 is perpendicular to the radius of the circular area of the CD)

With respect to claims 26 and 37, Bradshaw discloses wherein positioning the print head includes orienting the at least one column of nozzles substantially parallel to a tangent of the circular area at the radius of the circular area (Fig.2, 3).

With respect to claims 27 and 38, Bradshaw disclose printing at least one arcuate print pattern includes printing thee at least one arcuate print pattern along an arc center about a center of the circular area of the media (Column 7: line 60-65, Column 8: line 9-14).

With respect to claims 34 and 45, Bradshaw discloses that moving the print head along the radius of the disk (Fig.2: element 210, 212)

However, Bradshaw fails to teach a recording head adjacent a second side of the optical data disk opposite the first side and recording the optical data storage disk with the recording head while rotating the disk and limitation of claims 31-33 and 35.

Yuji teaches a recording head adjacent a second side of the optical data disk opposite the first side and recording the optical data storage disk with the recording head while rotating the disk (Fig.2: element 6, 1, Page 12: [0022]).

With respect to claims 31 and 42, Yuji discloses printing on the optical data storage disk and recording to the disk includes simultaneously printing and recording (page 6: [0008]).

With respect to claims 32, 35, 43 and 46, Yuji discloses printing on the disk and recoding on the disk includes printing and recording while rotating the disk at a predetermined speed (Page3: claim 3).

With respect to claim 33, Yuji discloses the print head and the disk relative to each other and the recording head and the disk relative to each other in a direction parallel to the radius of the disk (Fig.2: element 1).

With respect to claim 44, Yuji discloses the print head and the recording head are adapted to move relative to the disk in a direction substantially parallel to the radius of the disk (Fig.2: element 1, 4, 24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the printing head and recording head one on each side of the disk to printing and recording data onto the disk as taught by Yuji. The motivation of doing so is manufacturing processes without taking a long time.

5. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. (USPN 6,264,295) in view of Yuji (JP 0631906).

Bradshaw discloses a print head (fig.2: element 210) including at least one column of nozzles above the circular area of the media (element 201), including orienting the at least one column of nozzles substantially perpendicular to a radius of the circular extended below the print head (Fig.2, Fig.3) and means for rotating the disk (fig.2).

However, Bradshaw fails to teach simultaneously printing on the optical data storage disk from a first side of the disk and recording to the disk from a second side of the disk opposite the first side as the disk rotates

Yuji discloses simultaneously printing on the optical data storage disk from a first side of the disk and recording to the disk from a second side of the disk opposite the first side as the disk rotates (fig.2: element 1, 24, 4, Page 6:[0008]) and the recording head positioned on the second side of the disk (Fig.2: element 6, 4, 1)



It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the printing head and recording head one on each side of the disk to printing and recording data onto the disk as taught by Yuji. The motivation of doing so is manufacturing processes without taking a long time.

### ***Response to Arguments***

6. Applicant's arguments filed 4/21/05 have been fully considered but they are not persuasive.

Applicant's argument that Bradshaw and Yuji do not teach printing perpendicular to a radius of the media is not persuasive because refer to fig.2 of Bradshaw the print head prints circular line on the CD in the direction along the line 214 while the DC is rotating, the circular line along the direction 214 is perpendicular to the radius of the circular area of the CD) and refer to figure 3 and 4 of Yuji the print head prints circular line on the CD while the DC is rotating, the circular line is perpendicular to the radius of the circular area of the CD). Therefore, Bradshaw and Yuji disclose claimed invention.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

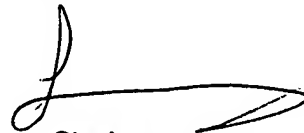
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

May 27, 2005



**Stephen D. Meier**  
Primary Examiner